

40



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,202	10/16/2001	Marc Charbonneau	12-69 US	3583
25319	7590	01/26/2005	EXAMINER	
FREEDMAN & ASSOCIATES 117 CENTREPOINTE DRIVE SUITE 350 NEPEAN, ONTARIO, K2G 5X3 CANADA			PARTHASARATHY, PRAMILA	
			ART UNIT	PAPER NUMBER
			2136	
DATE MAILED: 01/26/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/977,202

Applicant(s)

CHARBONNEAU, MARC

Examiner

Pramila Parthasarathy

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>05/05/2004</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This action is in response to the communication filed on May 05, 2004. Claims 1 – 23 were received for consideration. No preliminary amendments to the specification were filed. Claims 1 – 23 are currently being considered.
2. An initialed and dated copy of Applicant's IDS form 1449 is attached to the Office action.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method for securely supporting password change.

4. The disclosure is objected to because of the following informalities: Too many typographical mistakes and spacing problems. For example on Page 1, paragraph [0003], replace "company' ss" with "company's" and paragraph [0004], replace "password 's" with "password".

Appropriate and careful corrections throughout specification are required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 7, 11, 18 – 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bellemore et al. (U.S. Patent Number 5,944,825, hereinafter “Bell”).

Regarding Claim 1, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), comprising the steps of:

detecting an occurrence of a password change operation in execution on a system (Bell Column 4 lines 5 – 37);

detecting the new password when provided (Bell Column 4 lines 33 – 40); and,  
storing data indicative of the new password in a database other than the password database associated with the password change operation for later retrieval, the data indicative of the new password for use in providing the new password provision to the system automatically (Bell Column 4 lines 33 – 42 and Column 6 line 66 – Column 7 line 16).

Regarding Claim 5, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), comprising the steps of:

detecting a change password operation in execution on a system (Bell Column 4 lines 5 – 37);

displaying to a user a prompt for a new password, the prompt independent of the password change operation (Bell Column 3 lines 29 – 52 and Column 4 lines 33 – 40);

receiving the new password (Bell Column 4 lines 33 – 40);

performing an operation to change the password to the new password in the system (Bell Column 4 lines 33 – 40 and Column 6 lines 1 – 22); and,

storing the new password in a database independent of the change password operation and of the database where the changed password is stored by the change password operation (Bell Column 6 lines 11 – 36).

Regarding Claim 7, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), comprising the steps of:

detecting a password change operation in execution on a system (Column 4 lines 5 – 37);

displaying to a user a prompt for authentication information, the prompt independent of the password change operation (Bell Column 3 lines 29 – 52 and Column 4 lines 33 – 40);

receiving the authentication information (Bell Column 4 lines 20 – 33 and Column 5 lines 47 – 53);

when the authentication information is indicative of a known user, performing an operation to change the password of the known user to a new password in the system (Bell Column 4 lines 33 – 42; Column 5 lines 54- 59 and Column 6 line 66 – Column 7 line 13); and,

storing the new password in a database independent of the change password operation and of the database where the changed password is stored (Bell Column 6 lines 11 – 36 and Column 7 lines 4 – 19).

Regarding Claim 20, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), comprising the steps of:

detecting a password change operation in execution on a system having a known user authorized thereon (Bell Column 4 lines 5 – 37);

automatically generated a new password (Bell Column 1 lines 11 – 34 and Column 7 lines 4 – 19);

performing an operation to change the password to a new password in the system (Bell Column 4 lines 33 – 42; Column 5 lines 54- 59 and Column 6 line 66 – Column 7 line 13); and,

storing the new password in a database independent of the change password operation and of the database where the changed password is stored (Bell Column 6 lines 11 – 36 and Column 7 lines 4 – 19).

Claim 2 is rejected applied as above in rejecting Claim 1. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the step of detecting an occurrence of a change of password operating in execution on a system comprises the step of detecting a new password prompt (Bell Column 4 lines 33 – 37)

Claim 3 is rejected applied as above in rejecting Claim 1. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), comprising the steps of:

prompting a user to provide authorization data (Bell Column 2 lines 34 – 41 and Column 4 lines 33 – 37); and

associating the authorization data with the password (Bell Column 2 lines 34 – 59; Column 4 lines 20 – 42 and Column 7 lines 4 – 19).

Claim 4 is rejected applied as above in rejecting Claim 1. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the step of detecting

Art Unit: 2136

the new password comprises the step of detecting the new password at least two separate times (Bell Column 3 line 56 – Column 4 line 42).

Claim 6 is rejected applied as above in rejecting Claim 5. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the step of detecting the change password operation in execution on a system comprises the step of detecting password change command operations (Bell Column 4 line 33 – 37).

Claim 11 is rejected applied as above in rejecting Claim 7. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the step of performing an operation to change the password comprises the step of providing the new password to the system (Bell Column 7 lines 5 – 19).

Claim 18 is rejected applied as above in rejecting Claim 7. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), comprising the step of performing another operation to change another password of known user to the new password (Bell Column 7 lines 5 – 19).



Claim 19 is rejected applied as above in rejecting Claim 7. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), comprising the step of:

determining all passwords identical to the password being changed and automatically performing at least another operation to change each identical password of the known user to the new password (Bell Column 8 line 46 – Column 9 line 9).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8 – 10 and 12 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellemore et al. (U.S. Patent Number 5,944,825, hereinafter “Bell”) in view of Novoa et al. (U.S. Patent Number 6,636,973, hereinafter “Novoa”).

Claim 8 is rejected applied as above in rejecting Claim 7. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), prompt for authentication

Art Unit: 2136

information (Bell Column 4 lines 5 – 37). Bell does not teach that the prompt for authentication information a prompt for biometric information. However, Novoa discloses a biometrics-based password change method for securely changing password includes prompting for authentication information wherein authentication information a prompt for biometric information (Column 4 lines 40 – 63 and Column 5 lines 3 – 43). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Novoa's biometric-based password change method into the securely password changing method of Belle's.

Bell could have been modified by Novoa to arrive at the claimed invention by having the database, security process that are adapted for monitoring and detecting the password change request to request for the authentication information (Bell Column 4 lines 5 – 37) to be biometric information as taught by Novoa (Novoa Column 2 lines 27 – 41 and Column 6 lines 3 – 26). One of ordinary skill in the art would have been motivated to modify Bell by Novoa as discussed above because in a password based system, an unauthorized person who is able to obtain a valid password can still access the system while in a biometric-based system, the user needs both password and biometric information to access the system, thus using biometric authentication information would increase and improve network and system security as taught by Novoa.

Claim 9 is rejected applied as above in rejecting Claim 8. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), comprising the steps of:

providing biometric information (Novoa Column 4 lines 59 – 61 and Column 6 lines 27 – 41);

processing the provided biometric information to provide the biometric data (Novoa Column 6 lines 67 – Column 7 line 65);

comparing the biometric data with a stored template (Novoa Column 7 lines 36 – 65); and

in dependence upon a comparison result retrieving a user password from a database (Novoa Column 7 line 36 – Column 8 line 10).

Claim 10 is rejected applied as above in rejecting Claim 7. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the prompt for authentication information prompt for information stored on a smart card (Novoa Column 7 lines 29 – 35).

Claim 12 is rejected applied as above in rejecting Claim 7. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the step of performing an operation to change the password comprises the step of prompting the user to select

between provision of the new password and automatic generation of the new password (Novoa Column 7 lines 1 – 10 and lines 39 – 54).

Claim 14 is rejected applied as above in rejecting Claim 7. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the step of performing an operation to change the password comprises the step of automatically generation of the new password (Novoa Column 7 lines 1 – 10 and lines 39 – 54).

Claims 15 and 21 are rejected applied as above in rejecting Claims 13 and 20. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the automatically generated new password is unknown to the user (Novoa Column 7 lines 1 – 10 and lines 39 – 54).

Claim 13 is rejected applied as above in rejecting Claim 12. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the step of performing an operation to change the password comprises the step of automatically generation of the new password (Novoa Column 7 lines 1 – 10 and lines 39 – 54).

7. Claims 16, 17, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellemore et al. (U.S. Patent Number 5,944,825, hereinafter "Bell") in view of Novoa et al. (U.S. Patent Number 6,636,973, hereinafter "Novoa") further in view of Schneier (Bruce Schneier "Applied Cryptography, Second edition; hereinafter "Schneier").

Claims 16 and 22 are rejected applied as above in rejecting Claims 15 and 21. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5; Summary and Column 3 line 29 – Column 7 line 19), wherein the automatically generated new password is an encryption key (Bell Column 7 lines 5 – 19 and Novoa Column 7 lines 1 – 10 and lines 39 – 54 and Column 8 lines 11 – 18). Bell discloses securely changing password and Novoa discloses automatically generating new password. Even when taken together, Bell and Novoa do not disclose that the newly generated password is an encryption key. However, Schneier teaches that the passwords that are generated using randomly as taught by Novoa can be used as encryption keys (Schneier Pages 173 and 174). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Novoa's biometric-based password change method into the securely password changing method of Belle's and to use the automatically generated password as an encryption key.

Bell could have been modified by Novoa to arrive at the claimed invention by having the database, security process that are adapted for monitoring and detecting the

Art Unit: 2136

password change request to request for the authentication information (Bell Column 4 lines 5 – 37) to be biometric information as taught by Novoa (Novoa Column 2 lines 27 – 41 and Column 6 lines 3 – 26) wherein the password is an encryption as taught by Schneier. One of ordinary skill in the art would have been motivated to modify Bell by Novoa and Schneier as discussed above because in a password based system, an unauthorized person who is able to obtain a valid password can still access the system while in a biometric-based system, the user needs both password and biometric information to access the system, thus using biometric authentication information would increase and improve network and system security as taught by Novoa wherein the password is an encryption key, as taught by Schneier.

Claims 17 and 23 are rejected applied as above in rejecting Claims 16 and 22. Furthermore, Bell teaches and describes a method of securely supporting password change (Bell Fig. 1 – 5, Summary and Column 3 line 29 – Column 7 line 19) Bell discloses securely changing password and Novoa discloses automatically generating new password (Bell Column 7 lines 5 – 19 and Novoa Column 7 lines 1 – 10 and lines 39 – 54 and Column 8 lines 11 – 18). Even when taken together, Bell and Novoa do not disclose that the new password is encrypted using the encryption key. However, Schneier teaches that the new password is encrypted using the encryption key (Schneier Page 173 and 174). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Novoa's biometric-

Art Unit: 2136

based password change method into the securely password changing method of Belle's and to encrypt the password using an encryption key to provide secure password.

Bell could have been modified by Novoa to arrive at the claimed invention by having the database, security process that are adapted for monitoring and detecting the password change request to request for the authentication information (Bell Column 4 lines 5 – 37) to be biometric information as taught by Novoa (Novoa Column 2 lines 27 – 41 and Column 6 lines 3 – 26) wherein the password is encrypted using the encryption key as taught by Schneier. One of ordinary skill in the art would have been motivated to modify Bell by Novoa and Schneier as discussed above because in a password based system, an unauthorized person who is able to obtain a valid password can still access the system while in a biometric-based system, the user needs both password and biometric information to access the system, thus using biometric authentication information would increase and improve network and system security as taught by Novoa wherein the password is encrypted using the encryption key which is difficult to decrypt without the key, as taught by Schneier.

**Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO Form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pramila Parthasarathy whose telephone number is 571-272-3866. The examiner can normally be reached on 8:00a.m. To 5:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-232-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR only. For more information about the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*ase g*  
*AU2136*

Pramila Parthasarathy  
January 21, 2005.